Something Just Doesn't Feel Right

By Lt. John Allison

t was a not-so-gorgeous winter day in Atsugi, Japan, with a solid overcast from 2,500 to 8,000 feet, and multiple layers above that. The visibility was restricted to about one and a half miles, and the freezing level was at 2,000 feet. I was scheduled for a level III, defensive-BFM flight with a senior department head, and I looked forward to showing him how it was supposed to work.

The brief went as advertised. For weather considerations, I had briefed a section takeoff if the runway was dry. After the normally painful 30 minutes at the Atsugi holdshort, we were off and running with a textbook Hornet section takeoff. We went into the goo at 1,700 feet, a little sooner than expected. I made the call to bump up our bingo a few hundred pounds. Those extra few pounds of gas would be very helpful a little later.

After the long transit to the working area, we spent a lot of time finding a decent-sized hole in the nasty weather for our BFM. We eventually found an opening, and our first two sets went well. The third set had a slight twist. I was in the middle of a nose-low, defensive maneuver, when I noticed something just didn't feel right. There was quite a bit more yaw than usual, and the jet wasn't quickly responding to my commands. My mind raced. "What in the hell is wrong with this airplane?" I thought. I immediately called a knock-it-off, leveled my wings, and investigated the problem.

Soon after I leveled my wings, I heard the master caution "deedle, deedle" and Betty's voice saying, "Engine right. Engine right." After pulling back the right throttle to idle, I glanced at the IFEI, which showed the right engine was spooling down. It eventually stopped at 71 percent, plus or minus one; the throttle as unresponsive.

"OK, take a deep breath, calm down, consider what we have here, and try to look at the big picture," I thought. No abnormal indications appeared, besides the stuck rpm. There were no signs of a stall. My best guess was the right engine simply had rolled back. Since the Hornet has two



engines, a rollback is not a serious emergency, although it is prudent to get the jet on deck as soon as possible.

I put the needle on the nose and coordinated a trap and a tow with Atsugi tower. I would have to fly a PAR back into Atsugi, and I knew a trap would foul the runway for at least 15 minutes. There were six other Hornets airborne—seven, including my wingman—and all would be coming back into Atsugi about the same time for PAR approaches.

NAF Far East, by the way, has only one runway, with a tendency for the arresting gear to de-rig on landing, which presented a problem. I switched to area-common frequency, told everyone of my emergency, broadcast my intentions, and advised everyone they might want to buster home and beat us to the field. My wingman and I would fly a semi-max-endurance profile and would land after everyone was safe on deck.

The plan was working well, and three jets had managed to pass us and land. However, it became apparent the plan, from this point on, would not play out so smoothly. Yokota Approach Control started to have serious difficulties handling the recovering aircraft. They were confusing call signs and giving vectors to the wrong aircraft. The three aircraft behind us were unable to pass us, despite our attempts to slow. We were all in relatively the same airspace, low on gas, and getting vectored by Yokota Approach.

I had started my descent from 8,000 feet and again went IMC. I noticed my rpm slowly was decaying, with decreasing altitude, but I had decided to keep the right engine at idle to maintain hydraulics for gear-flap extension, normal braking, and anti-skid.

I was at 4,000 feet, with 2,800 pounds of fuel. SOP states we shall be on deck with 3,000 pounds of fuel during night-IMC conditions. The other Hornets also were low on gas, which compounded the problem. From talking with Yokota Approach and other aircraft, I decided to execute another 360-degree, left-hand, delay maneuver to allow two other aircraft to land, before I fouled the runway for 15 minutes.

Halfway through my delay maneuver, the situation took another turn for the worse. I received Betty's "Engine right. Engine right" aural warning. The right engine rpm had decayed so much the engine had flamed out. I immediately went to half flaps and dropped the gear and hook. I was hoping the residual hyd 2A pressure would be enough to get three down and locked. With all that was going on, I didn't feel like fooling with emergency-gear extension. I breathed a sigh of relief

when I felt the familiar "thunk, thunk, thunk," and three green lights stared at me.

The combination of IMC, potential icing, low fuel, and single-engine conditions had me more than a little uneasy. The situation was deteriorating rapidly, and still there were two airborne Hornets. I knew our divert, Yokota AB, had 11,000 feet of runway, TACAN weather minimums, and only was 18 short miles away. Our fuel states all were close to 2,000 pounds, which left little time for fooling around. I needed to get that jet and myself on deck as soon as possible. The two remaining Hornets easily could make it to Yokota and take the gear if they needed to.

I declared an emergency and immediately received vectors to the final approach course for the PAR. The last remaining hurdle was descending from 4,000 feet to a point where I could receive commands from the final controller. Since I was so close to the field, my profile closely resembled a falling rock. This situation definitely was not ideal, especially since I had to keep the left engine above 85 percent to avoid a MECH reversion of the flight controls, and I still was in IMC. Eventually, I received PAR commands and saw the threshold lights at a mile. I was aiming for the short-field gear and was elated to feel the jet decelerate and finally stop. Although the other jets were low on fuel, they landed uneventfully.

The entire flight started out as a good-deal BFM flight, albeit with marginal weather at the field. My original emergency was not that serious, and I felt we had a good game plan to get all the Hornets on deck. A combination of single-runway operations, bad weather, numerous aircraft airborne, saturated approach control, and a deteriorating situation with my aircraft all contributed to a stressful event for everyone.

Considering our fuel states and the requirement for each of us to shoot an approach, it would have been prudent to divert more aircraft to Yokota earlier in the evolution. I felt our bingo-fuel numbers were more than adequate for our RTB profile, an approach, and a divert. We actually started our trip home above our conservative bingo-fuel state. However, all the unforeseen complications involved with operating out of NAF Atsugi reared their ugly heads at one time and quickly put most of us in the proverbial hurt locker. The best we can do is prepare for each flight, use ORM, concentrate on execution once airborne, and adapt to rapidly changing conditions.

Lt. Allison flies with VFA-192.